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ABSTRACT

A Quality Assurance Program (QAP) developed at the College of St. Francis is presented that is based on an open systems approach. The model allows an institution to continually monitor, evaluate, and, when necessary, modify its academic programs, graduates or undergraduate, traditionally or non-traditionally delivered, to assure quality. Part I answers basic questions about the Quality Assurance Program, including definitions of quality, and open system-based models, QAP objectives, and program administration. Part II describes the open system approach, the three phases of the program (structure, process, and outcomes), the flow of activities, environments, taxonomies for assessment, sources of evidence/information and performance indicators, economic and financial elements of the program, and stages for the Quality Assurance Program. As of June 1980, the College of St. Francis had completed two of the three QAP stages, administered by the vice president for academic affairs. A glossary and bibliography are appended. (IC)

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QUALITY ASSURANCE IN HIGHER EDUCATION: AN OUTLINE ADAPTABLE TO SMALL COLLEGES OFFERINGS ON AND OFF-CAMPUS PROGRAMS

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INTRODUCTION

A model to insure qualitative educational needs was developed by the College of St. Francis in February, 1980. This quality-control plan encompassed all the programs at the College, as well as other traditional programs with a non-traditional delivery. The latter is comprised of the bachelor degree completion program for nurses initiated in 1971 in Illinois, and now expanded to seventeen states, a degree completion program for child care workers initiated in 1981, and the graduate program in Health Services Administration now expanded to seven states.

A monitoring process was established for assessing the quality of the above mentioned program. The process is based on the components of the quality-control plan called the Quality Assurance Program (Q.A.P.). This system is subject to refinements on a continuing basis. It is a total concept (model) which assembles many of the evaluative processes and activities into an organized and manageable plan.

Assessment of quality on campus, in a less formal way, has been an ongoing process at the College. Each program, each division, each support service has continually been engaged in evaluation. The structure and process of the College have made this possible since the College recognizes the centrality of evaluation for effective planning.

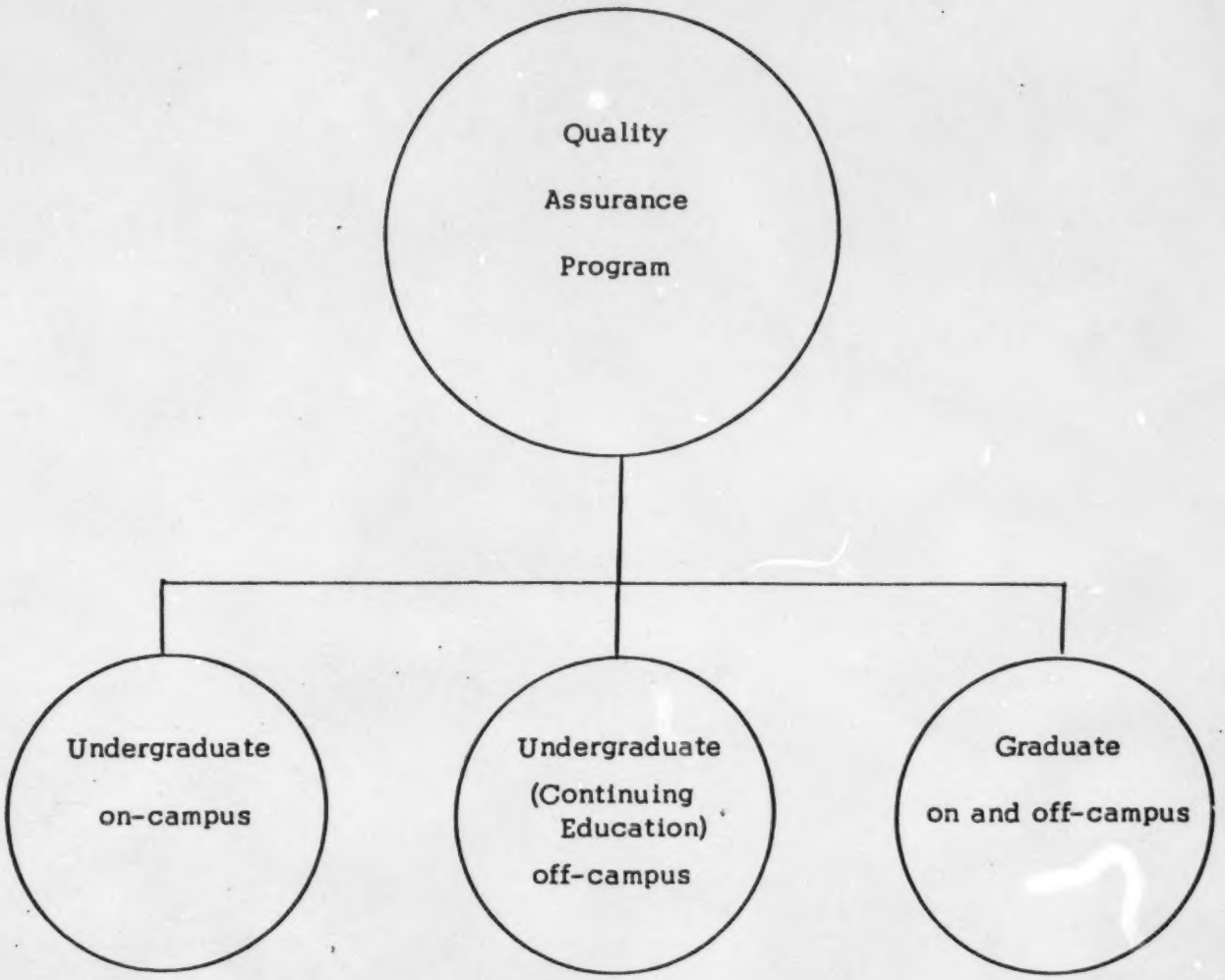
The Quality Assurance Program was implemented in the Summer, 1980, and became an integral part of every academic program.

The scope of the Quality Assurance Program can be visualized as in Figure 1.

Figure 1

College of St. Francis

Scope of Q.A.P.



I. BASIC QUESTIONS (WHO, WHAT, WHEN, WHERE, WHY AND HOW) ABOUT THE QUALITY ASSURANCE PROGRAM (Q.A.P.)

What is the Q.A.P.?

The College of St. Francis' Quality Assurance Program is a program based on an open system approach and able to be visually conceptualized as a model whereby the institution continually monitors, evaluates, and, when necessary, modifies its academic programs, graduate or undergraduate, traditionally or non-traditionally delivered, so as to assure quality.

What is quality?

There are many definitions of quality. There are many criteria, indicators, and descriptors of quality. For purposes of this program, we subscribe to a definition proposed by Astin (1980):

> ... a "high quality" institution is one that knows what's happening to its students and one that gives faculty clear-cut opportunities to develop their teaching skills under minimally threatening conditions. Further, the high-quality institution has a system of feedback on student development that enables it to make appropriate adjustments in programs or policies when the need for change or improvement is indicated. In other words, quality is equated here not with prestige or physical facilities but rather with a continuing process of critical self-examination that focuses on the institution's contribution to the student's intellectual and personal development.

We subscribe also to those quantitative measures often employed by regional and programmatic accrediting agencies and by professional and learned societies. We aim, however, to supplement these useful and important measures with additional descriptors. We propose, in

conjunction with Project QUE, a 1979 national project sponsored by the Council for the Advancement of Small Colleges (CASC), that there are seven additional indicators or descriptors which describe more closely what is usually meant by "quality" in institutions of higher education than is possible using only the more traditional, quantitative input indicators. An educational program of high quality is:

Attractive:	It does something that brings people to it.
Beneficial:	It does something that will be helpful to the individuals and the community involved in it.
Congruent:	It does what it says it will do.
Distinctive:	It is responsive to the unique characteristics of the college and its people, and hence is unlike most other programs.
Effective:	It does what it does very well and can demonstrate its effectiveness to others.
Functional:	It provides learners with attributes needed to function in today's society.
Growth Producing:	It enhances growth in a number of important directions of learning.

Is the College's Quality Assurance Program based upon or documented by any recent literature or experience in the field?

Yes. The Quality Assurance Program is conceptually and operationally similar, though less complex, to the model presented in A Model for Assessing the Quality of Non-Tradtional Programs in Higher Education (Harshman, 1979). This model was developed and tested at the Metropolitan College, St. Louis University; the project is funded in

part by a grant from the Ford Foundation. The conceptual, theoretical and operational components of the quality assessment model, as well as four pilot studies carried out as part of the project, are included in the report.

Other primary resources include Evaluating Non-Traditional Programs: Strategies, Methods, and Materials (Murphy and Pringle, 1979), and its companion volume, Evaluating Non-Traditional Programs: An Annotated Bibliography (Gonzales and Murphy, 1979).

Over one hundred secondary sources were consulted.

What is meant by a model based on an open system?

Succinctly, the model is based on the proposition that the monitoring of a program (or the assessment of quality) is grounded in the principle of the information input, coding of negative feedback processes in open systems and that these activities (or this principle) can be organized around (focused on) the properties of systems, i.e., environment, input, throughput, and output.

What are the aims, and characteristics of the College's Assurance Program Model?

a. The model is in congruence with the College's Mission Statement.

b. The model for assuring quality serves the decision making needs of various constituencies.

c. The model is consistent and relevant to the educational needs of full-time students and also to the educational needs of fully-employed professionals.

d. The model is flexible and adaptable.

e. The model is holistic, i.e., it includes considerations for all aspects of a program(s).

f. The model is feasible; it can be carried out.

g. The evaluation is ongoing rather than "one shot" and will include longitudinal as well as cross-sectional data.

h. The model places a value on and search for a wide range of positive and negative processes and outcomes.

i. The results of the implementation of the model can be reflected in the institution's or program's planning and decision-making.

j. The model will be an integral part of education programs, not segmented from them.

k. Human and financial resources can be carefully committed to the model, although it is assumed that the resource commitments will not be large and the scope of effort implementation will be limited accordingly.

l. The model's cost implications have been factored into the budget.

m. The model reflects consideration for the relationship between client/community needs and educational programs.

n. The model has specificity; it is sufficiently detailed to provide a basis for action.

o. The model will focus on a program's current goals.

p. The model is effective; it will accomplish what is desired.

q. The sources of evidence (kinds of data collected) can be expanded.

r. Persons involved in making decisions about quality are totally familiar with what constitutes non-traditionally delivered as well as traditionally delivered programs.

s. The model is acceptable to the College's various publics.

The preceding aims and characteristics by no means represent all possible aims and characteristics, but they provide a broad spectrum of the values which underly what follows. This exercise only reinforces and, at the same time, clarifies what seems to be emerging in the literature relating to quality:

a. The definition and assessment of quality is primarily a program/institution responsibility although a given model or process may serve decisions at several levels.

b. Historical models of quality assessment are too limited in scope and too short in duration.

c. The assessment of quality has often been an activity appended to an institution rather than a function integrated with it.

As the model for the assessment of quality is implemented, there should be some evidence that the limitations of the past are redressed and that the values listed above are manifested.

What are the purposes of the Quality Assurance Program?

The purposes of the Q.A.P. are:

a. To contribute to decisions about program installation.

b. To contribute to decisions about program continuation or expansion.

c. To contribute to decisions about program(s) modification.

In addition to these purposes, which are generally, and most recently proposed as the purposes of evaluation (Anderson and Ball, 1979), the College's reasons or "why's" for such an assurance program are:

d. To offer the best programs possible given the resources available.

e. To fulfill program goals and objectives.

f. To renew and rejuvenate the College community and foster high morale.

g. To meet and aspire to surpass the standards of accrediting groups.

h. To insure consumer protection.

i. To enhance the institution's image.

j. To foster enrollments.

k. To lend exceptional credence to marketing and recruiting plans.

l. To contribute to the literature and experience in the field of assessment of quality.

m. To contribute to long-range academic and institutional planning.

n. To graduate professionally capable and satisfied students.

Who is responsible for the administration of the Quality Assurance Program?

The Vice President for Academic Affairs is responsible. He is assisted by the academic affairs administrators and division chairpersons. (Figure 2)

Figure 2

The Management of the Quality Assurance Program (Q.A.P.)

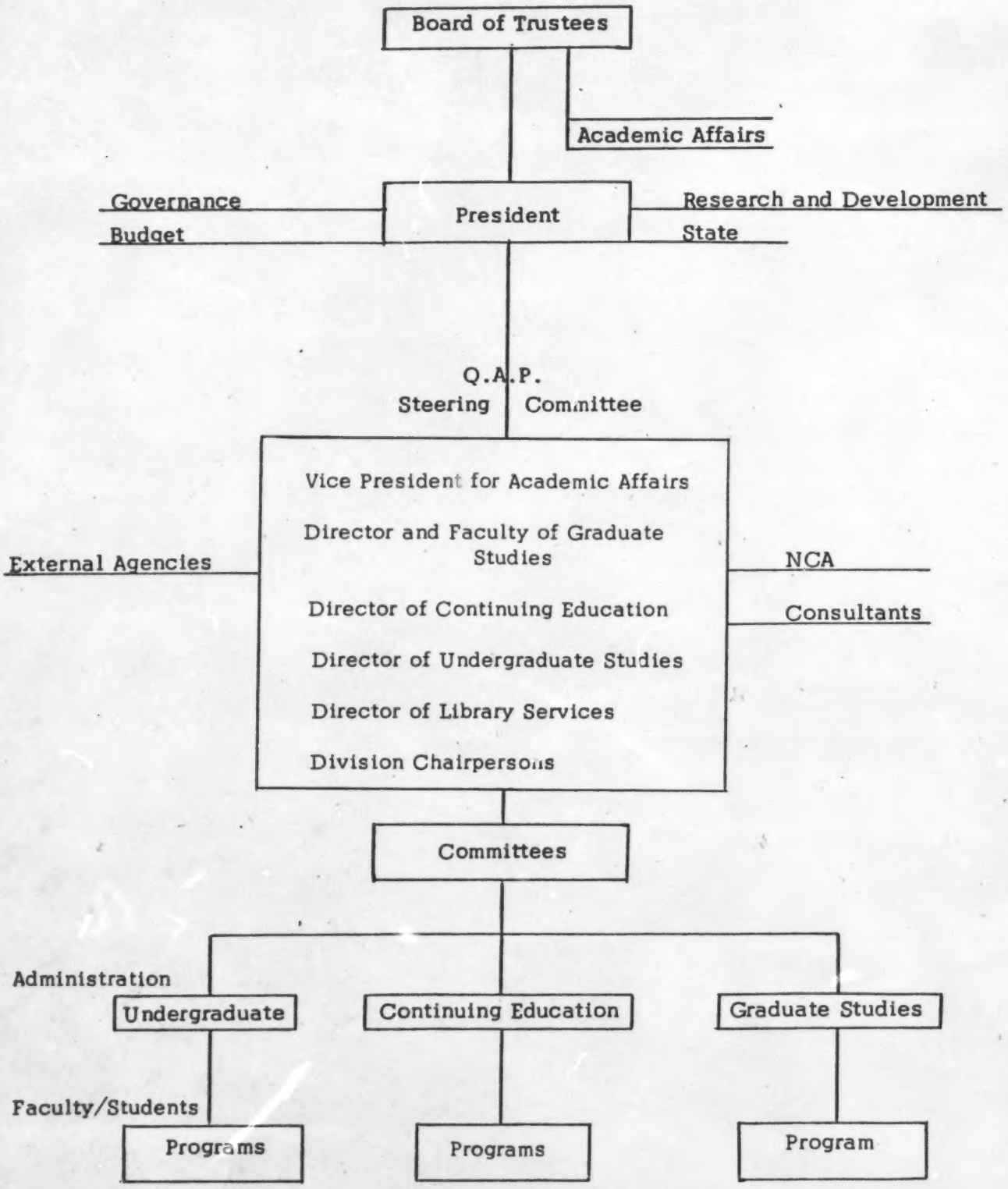


Figure 3

Monitoring Plan

1980 - 1981		1981 - 1982		1982 - 1983		1983 - 1984		1984 - 1985	
Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
	Annual Report		Annual Report		Annual Report		Annual Report		Annual Report
	Steering Committee Review		Steering Committee Review		Steering Committee Review		Steering Committee Review		Steering Committee Review
		Q.A.P. Report	Focus Visit of N.C. Review Comm.			Q.A.P. Report	Focus Visit of N.C. Review Comm.		
	External Agencies as req.		External Agencies as req.		External A Agencies as req.		External Agencies as req.		External Agencies as req.
						Institutional Self-Study		Self-Study Rpt.	Comprehen-sive Evaluation

Who watches those who watch?

The Quality Assurance Program will be monitored by the Steering Committee of the College, every other year by representatives of the North Central Association's Commission on Institutions of Higher Education and state officials as required. As required or when requested, other agencies or parties are invited to inquire about the Program. (Figure 3)

When will the Quality Assurance Program be implemented and how long will it last?

The Program was implemented during the Summer, 1980. Although there are beginning and ending periods for each activity in the Program, the model consists of a process that is continuous and that serves the major decisions (external and internal) which have priority at any given time. It assumed that as the continuity of quality assessment and assurance increases, the quality will increase in educational programs. A model which is ongoing will improve the probability of carrying out longitudinal (and not just cross-sectional) studies.

How does the Qualtiy Assurance Program work?

Please consult Figure 4.

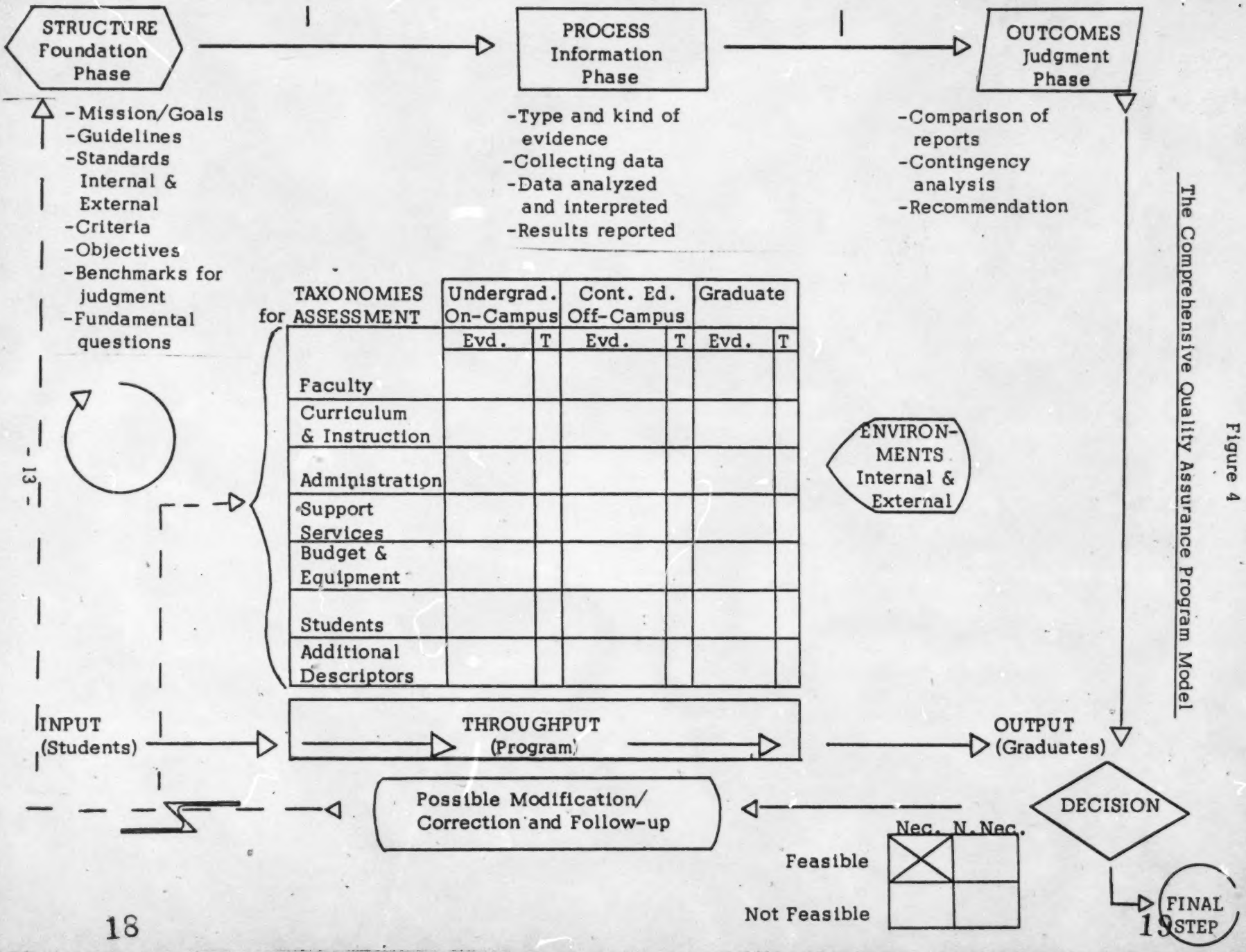


Figure 4

The Comprehensive Quality Assurance Program Model

II. PRESENTATION OF THE PROGRAM AND Q.A.P. MODEL

A. The Open System Approach

A system is said to be open rather than closed when it in some way is dependent on and interacts with its environment. Although there are, according to Katz and Kahn (1978), several characteristics common to all open systems, the essential characteristics include input (energy from the environment), throughput (converting inputs to outputs), outputs (products), and the coding of feedback. The most effective of the various forms of information is negative feedback. It is the basis for various changes and adjustments in the system.

B. The Three Phases of the Program

The model employs three general categories or phases of activity:

1. Structure or Foundation Phase.

   This is the initial phase of evaluation. From the structure of the College, including its mission and goals, guidelines, standards, criteria, objectives, benchmarks for judgment, fundamental questions and types of evidences are identified.

2. Process or Information Phase.

   The products of this phase are based on the questions asked, criteria established, and/or values which emerge in the structure phase. Steps in this phase include: (a) type and kind of evidence or data, (b) methods for collecting the information, (c) data are analyzed, and (d) the results are interpreted and reported.

3. Outcomes or Judgment Phase.

This phase involves (a) the comparison of the reports from the information phase with the standards identified in the structure phase, (b) the conclusions are linked to some element(s) of the system, and (c) recommendations are made.

C. The Flow of Activities

Following the three phases noted above, decisions are made. If the purpose is to monitor a system or program with the aim of improving the way it operates, the recommendations and decisions serve as a feedback loop to the system (program) and provide the basis for possible modification/correction. At times, the primary purpose of the evaluation is to make an estimate (or judgment) of worth or value; the judgment constitutes the final step (e.g., terminate, revise, expand etc.).

D. Environments

Open systems constantly receive information from the environment. The information impinges upon, affects, and is often transmitted with inputs. Environmental factors are:

1. External: for example, accrediting groups, educational agencies, governments, community groups and needs, professional societies, alumni, congregation, church, etc., and,
2. Internal: traditions, president, planning and budgeting, physical facilities, faculty morale, governance, etc.

E. Taxonomies for Assessment

There are six basic components of an academic program: faculty, curriculum and instruction, administration, support services, budget and equipment, and students. At first, evidence (data) will be collected on these categories. In time, more may be added. There are also seven descriptors or indicators of quality which are somewhat open-ended and are mentioned in Part 1.

F. Sources of Evidence/Information and Performance Indicators

Figure 5 details the actual data to be collected, analyzed and reported. The evidence is collected according to the time noted.

G. Economic and Financial Elements of the Program

A vital aspect of quality assurance for an academic program is, of course, its economic viability and stability. The financial categories,together with their objectives and performance indicators which will be developed later, will include:

1. Economic performance
2. Economic flexibility
3. Financial integrity
4. Compensation practices
5. Cash flow
6. Liquidity, contingency management, and
7. Efficiency in handling revenues and expenditures

H. Stages for the Quality Assurance Program

An outline of the three stages of the Q·A.P. is presented here.

Figure 5

Sources of Evidence by Assessment Taxonomies, Program and Time

TAXONOMIES FOR ASSESSMENT	Undergrad. On-Campus		Undergrad. Cont. Ed.		Graduate	
	Evidence	Time	Evidence	Time	Evidence	Time
FACULTY	Sources of Evidence for Undergraduate On-Campus Programs are well-established and not itemized here. During the 1981-82 Academic Year, the Quality Assurance Program will be extended to this area and may incorporate some sources of evidence from the two other areas.		Appointment/Fac.Rev. C&I Eval. by Students Admin.Superv.Report Rev. by Div.Chair & Faculty Fac. Rev. of Tchng. Material(A.F.E.) * Eval.of Advising C&I	 * * 	Appoint./Fac.Rev. Fac.Self Assess. C&I Eval. by Students Eval.of Advsng.C&I Admin.Suprv.Report Fac.Rev.&Rep.(AFE) Report of Director and VPAA	
CURRICULUM AND INSTRUCTION			C&I Eval.by Students Pro.Eval.Guidelines Governance Rev.& Report Consultant Report Advisory C. Report Grad.Assess.Test Fac.Slf.Study Survey	 * 	C&I Eval.by Students Prog.Eval.Guidelines Advisory,Q.P.,and Coord.Comm.Rep. Stud.Outcomes Surv. Admin.Suprv.Rep. Govern. Rev.& Rep.	
ADMINISTRATION			VPAA Goal Review Fac.Slf.Stud.Survey Director's Rev.&Rep. Grad.Followup Surv. President's Review	 * * 	VPAA Goal Review Fac. Assessment Student Assessment Director's Fac. Rev. Grad.Followup Surv. President's Review	
SUPPORT SERVICES			Of.C.Ed.-Fac.S.S.S * Adv/Couns.C&I Eval. Admis.Staff Report Facilities-Fac.S.S.S Registrar-Staff Rep. Library-Grad.F.Surv. * Bookstore-Fac.S.S.S	 * *	Grad.Comms.Rep. Library Avd. C.Rep. Fac. Self Study Surv of Lib.,Reg.,Fin. Aid,Bkstr.,Cnslg. Advsng/C&I Eval. Grant Support Rev.	
BUDGET AND EQUIPMENT			Long Rng.Fin.Plan. Report * Goal Rev. of Developmental Budget Advisory Brd.Rev. Div.Chair.Rev.Rep. Equip./Fac.S.S.S.	 	Long Rng.Fin.Plan Report Goal Rev.of Budget MSHSA Crd.C.Rev. Div.Ch.Rev.&Rep. Equip./Fac.S.S.S.	
STUDENTS			Fac.Slf.Study Surv. Grad.Assess.Test Grad.Followup Surv. GPA On Campus Fac.Rev. Admissions Data	* * 	Stud.Slf.Assess. & Satisfaction Surv. Fac.Assess. of Stud. Admis.Comm. Data Qual.Paper C. Rep. GPA/Employer Serv.* Grad.Followup Surv.	
DESCRIPTORS Attractive Beneficial Congruent Distinctive Effective			* Instruments in development.			

1. Preparation Stage

    a. Program personnel review the Quality Assurance Program (Step 1)

    b. Identify Administrators/Staff responsible for decisions in Program (Step 2)

    c. Select a Steering Committee (Step 3), (Figure 2)

    d. Orient Steering Committee to Program (Step 4)

    e. Train the Steering Committee in the Quality Assurance Program (Step 5)

2. Design Stage

    a. The Foundation (structure) Stage (Step 1): questions asked; goals stated

    b. The Information (process) Stage (Step 2): standards operationalized

        1) The sources of evidence related to the quality questions are selected

        2) The person(s) who will collect and analyze the evidence (data) are identified

    c. Establishing a Long Range Schedule (Step 3)

    d. Judgment (outcomes) Phase (Step 4)

3. Implementation Stage

    a. Schedule the evaluative studies for the year

    b. Preliminary reports are prepared

    c. Hold the Judgment Session(s)

    d. Prepare the final report

    e. Incorporate results into Planning and Programming

    f. Communicate results to constituents

CONCLUDING REMARKS

The College of St. Francis has already begun to implement the Quality Assurance Program outlined here. During the current semester, following the visit of the Evaluation Team, the Vice President for Academic Affairs, the Dean of Graduate Studies, the Director of Library Services, the Continuing Education staff and the Assistant to the Vice President for Academic Affairs began to detail the Structure Phase of the model. All materials, information, policies, and statements required to accomplish this phase were identified, located, and assembled by the Dean of Graduate Studies. The Process Phase has been similarly addressed.

The Steering Committee administering the Quality Assurance Program has also begun to compile a more detailed manual pertaining to the Program. Instruments that will be required for the collection of data have been itemized; several of these instruments already exist, others have been recently developed and still others remain to be constructed. Two of the three stages were completed in June, 1980.

The experiences with Q.A.P. thus far have been rewarding and the effort expended was not in vain. The College now has a more objective procedure to follow in its evaluative reviews of programs.

DEFINITIONS

Assessment	is the act of determining the rate or amount of something. It implies a quantitative evaluation of a given attribute of learning.
Cooperation	is the communality of interest occurring because outcome/benefits from joint efforts will be distributed equally among participants.
Concurrent System	is the evaluation of quality at the time the student is being educated to assure the proper use of resources and services.
Criteria	are descriptive statements of performance, behavior, or circumstances which represent a satisfactory, positive, or excellent performance. They provide guides or measurements which are reliable and will be interpreted in the same way from person to person provided they have this characteristic or attribute: achievable, concise, understandable, and educationally sound. Some criteria are objective; others subjective.
Criterion	is one indication of appropriate quality or utilization of educational services used in review of the student/learning structure, process and outcome.
Effectiveness	is the degree to which the organization has met its goals, the difference between the intended outcome and the actual outcome.
Environment	is a set of relevant variables such as internal (controllable) and external (beyond control). The organization strives to cope with external variables.
Evaluation	is the process for determining the value or amount of success in achieving a predetermined objective. It includes at least the following steps: formulation of the objective, identification of the proper criteria to be used in measuring success, determination and explanation of the degree of success, and recommendations for further program activity, change, etc.

Function	is an area of responsibility whose discharge is required in order to meet the program objectives; it contributes directly toward the achievement of the objective.
Goal (s)	is what an organization intends to accomplish.
Institutionalization	is the process of making permanent; e.g., spontaneous and adaptive behavior of human beings to a set of circumstances at one point in time may become "standard solution" to similar circumstances in the future. Hence, what was originally interpersonal becomes impersonal: person-related expectations become position-related.
Internalization	is that behavior change which occurs when a person perceives action as relevant and credible so that the individual incorporates the action within his value system and reorganizes the perceptions in keeping with the newly valued behavior.
Norm	represents the observed range of performance or the prevailing pattern or percentage of compliance.
Optimum	is the best value that can be achieved for a criterion measure. For criteria that have a positive sense, such as quality, the best value is a maximum.
Outcome	describes the student's learning status in terms of satisfaction and success. It is the final consequence. It is crucial to evaluation and tends to rely on two basic rationales: philosophical belief and practical consideration.
Process	describes the ideal implementation of "inputs" into "throughputs" to result in optimum "outputs". It has to do with activating the structure (inputs) in an effective manner to reach the goals of education (learning). The process measures evaluate how a student is moved into and out of the educational system. Process techniques rely on generally accepted norms or defined criteria or objective judgment and on the diligence of evaluations. Process refers to how "things" are done to and for students by faculty, administration and staff.
Program	is a plan or system under which action may be taken toward a goal.

Quality	is the totality of features and characteristics of a product or service that bears on its ability to satisfy a given need. It is the event to which services are provided in accordance with recommended standards and guidelines. It is the excellence, character, substance and value. Quality is determined by four factors: effectiveness, safety, cost and student satisfaction.
Quality Assessment	is a term used for the retrospective study portion of teaching/learning.
Quality Assurance	is a generic term for efforts of faculty and educational programs to provide evidence that there is merit (effectiveness-goals being met) and efficient utilization of human and financial resources. It is composed of activities and programs intended to secure the quality of education in a defined educational setting or program. It consists not only of being capable of assessing the quality of education, but of effecting those changes in the delivery of education necessary to achieve optimal outcome.
Quality Education	is the kind of education (learning) which offers the student the greatest achievable educational benefit with a minimum of unnecessary effects and the use of resources in a manner satisfactory to the student.
Reliability	is a criterion for assessing quality of data. Data are reliable if they are consistent, accurate and precise and, therefore, reproducible.
Retrospective System	is the evaluation after the student has graduated.
Screening	is the process in which norms, criteria and standards are used to analyze a number of cases in order to make selections for study.
Standard	is a known quantitative element or component of an operation which is recognized as a completed step, process or action. Standards represent allowable deviations from the norm. It is a plus or minus compliance percentage variable from the norm that is recognized as an excellent practice. It is a level below which improvement is desirable.

Structure	refers to the settings and instrumentation available and used in the education process. It encompasses the characteristics of the administrative organization and the qualifications and credentials of educational professionals. These characteristics are descriptive.
System	is a set of parts coordinated to achieve a set of goals over time. The basis of the coordination defines the system. There may be supra and sub systems (depending on the basis for decision making) which automatically fall into a nesting system. It is somewhat like the concentric circles which form when a pebble is dropped into water. Where the pebble is dropped (who is chosen to be the decision maker) determines which becomes the system, the sub-system, and the supra-system. Systems involve the following functions: securing inputs, implementing the throughputs, monitoring and analyzing the outputs, feedback, control, maintenance of members adapting to the relevant internal and external environments. The open system is unpredictable and has less than fully-controllable elements affecting the system's behavior and outcome in contrast to the closed system. Not all the variance is accounted for in the open system. An open system is relatively rather than fully predictable. The open system, as the name implies, responds to the internal or external environment and adjusts accordingly. There is continual feedback. In a college where the elements of human behavior rank high, the open system is far more appropriate.
Validity	is the degree to which data on results are correct or true. If the measure actually measures what it is supposed to measure, it is valid.
Variable	is the characteristic trait, property or attribute which takes on a range of values.

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